

***Collomia macrocalyx* Leiberg**
bristle-flowered collomia
Polemoniaceae (Phlox Family)

Status: State Sensitive
Rank: G3G4S1

General Description: Adapted from Hitchcock et al. (1959): Annual, up to 4 inches tall, finely puberulent below, more scaberulous and slightly viscid above, branched when well developed, the main stem and branches terminating in dense, leafy-bracteate flower clusters. Leaves entire, those below the inflorescence few and sometimes deciduous, the lower petiolate, with small, elliptic blade, sometimes opposite. Leaves subtending the flower clusters linear, $\frac{1}{2}$ to $1\frac{1}{4}$ inch x $\frac{1}{16}$ inch, tapering to a slender point. Calyx teeth narrow, firm, aristate-attenuate, evidently unequal, the longer ones $\frac{1}{4}$ to $\frac{1}{2}$ inch long in fruit. Corolla blue, $\frac{1}{2}$ inch long, the lobes $\frac{1}{8}$ inch long. Filaments short, less than $\frac{1}{16}$ inch long, somewhat unequally inserted a little below the sinuses. Locules uniovulate.

Identification Tips: *Collomia macrocalyx* occurs with several other species of *Collomia* within its range in Washington, from which it can be distinguished by the long, unequal calyx lobes.

Phenology: Flowers late May to early June.

Range: The taxon occurs from north-central Oregon into central Washington. In Washington, the taxon is known from Kittitas and Yakima counties in the Columbia Basin physiographic province.

Habitat: Dry open habitats, east of the Cascade Mountains. In Washington, the species has been found on talus, rock outcrops and lithosols. Vegetation in this habitat is generally sparse and the species diversity is usually low. The species has been found growing in *Artemisia tridentata*/*Agropyron spicatum* and *Artemisia rigida*/*Poa secunda* habitat types. Other species found growing at these sites include *Salvia dorrii*, *Eriogonum niveum*, *E. sphaerocephalum*, *E. thymoides*, *Phacelia linearis*, *Collomia grandiflora*, *Balsamorhiza careyana*, and *Chaenactis douglasii*. Elevation ranges from 850 to 2100 feet.

Collomia macrocalyx
bristle-flowered collomia



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Known distribution of
Collomia macrocalyx in
Washington



- Current (1980+)
- Historic (older than 1980)

Collomia macrocalyx

bristle-flowered collomia



Photo by
Richard Easterny



Photo by BLM



Photo by BLM

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Ecology: The density and size of populations varies widely from year to year, presumably as a result of differences in yearly weather patterns. As a winter annual, seeds germinate after autumn rains. Little is known, however, about factors affecting seedling survival and other aspects of the ecology of the species. Weedy, non-native annuals, such as *Bromus tectorum*, are common in the micro-habitats occupied by *Collomia macrocalyx*. Such species are likely in direct competition with *C. macrocalyx*.

State Status Comments: The small number of populations and the restricted range of the taxon both contribute to the species' status in Washington.

Inventory Needs: Additional surveys are needed throughout the Columbia Basin in appropriate habitats.

Threats and Management Concerns: The primary threat to the species is invasion of its habitat by non-native species, in particular cheat grass (*Bromus tectorum*). Other threats include grazing, ORV use, and military training.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1959. *Vascular Plants of the Pacific Northwest, Part 4: Ericaceae Through Campanulaceae*. University of Washington Press, Seattle. 510 pp.